

---

*Evaluation of* *Executive*  
*Summary*  
*of the*  
**Final Report**  
**2014-2017**



---

Prepared by



Heather L. Horsley, Ph.D.  
Jaime Madison Vasquez, Ph.D  
William H. Teale, Ed.D

---

Lead Learn Excel and the Evaluation of Lead Learn Excel were funded by the Race to the Top Early Learning Challenge grant program and overseen by the Illinois Governor's Office of Early Childhood Development.

**June 30, 2017**

---

# EXECUTIVE SUMMARY

## Background

High quality preschool instruction is essential to producing developmental gains for young children and can mitigate risk factors such as family poverty and low parental education (Pianta et al., 2009). Even in programs with highly qualified teachers, teacher-child interactions often do not provide the level of instructional support that children need to be well prepared for success in kindergarten (Burchinal et al., 2010). With the support of Race to the Top Early Learning Challenge grant program, the Illinois Governor’s Office of Early Childhood Development (OECD) aimed to strategically increase the quality of instruction in early learning programs from ‘adequate’ to ‘good’ and from ‘good’ to ‘great’ (U.S. Department of Education, 2013a). OECD established the Preschool Instructional Excellence competitive grant in order to seek out a promising approach to meeting the state’s strategic priorities. Following a thorough review process, the Ounce of Prevention Fund (the Ounce), in partnership with the McCormick Center for Early Childhood Leadership, was awarded the grant.

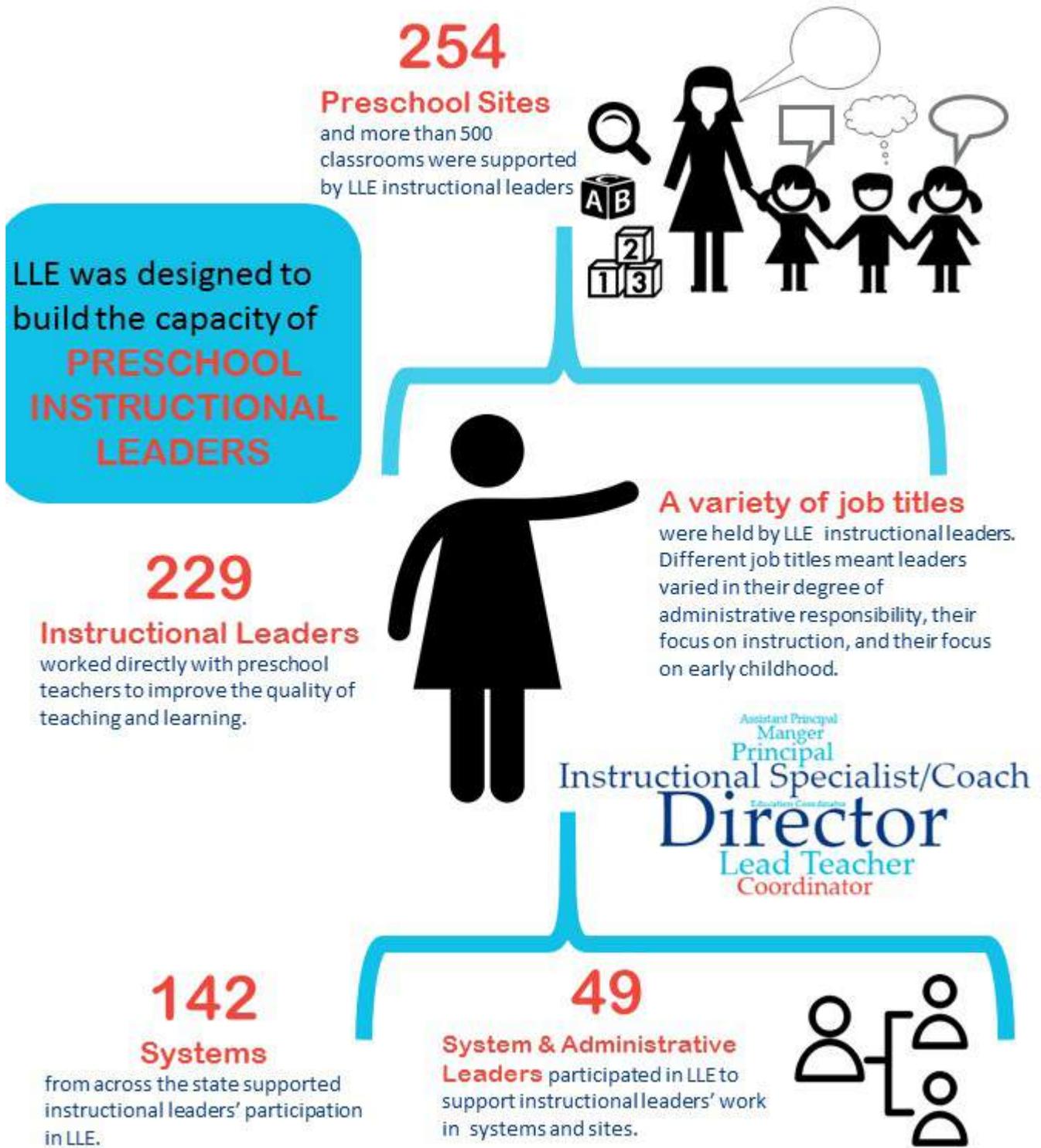
A central commitment of the Ounce has been to explore and codify models of job-embedded professional development that can be adapted to other ECE settings, and by extension, improve the life chances of children living in high-needs communities across the U.S. (Educare Learning Network, 2014; Whalen, Horsley, Parkinson, Vasquez, & Tozer, 2016; Yazejian, Bryant & Kennel; 2013). Through the Preschool Instructional Excellence grant, the Ounce continued to focus on the development of instructional leaders and job-embedded professional development for preschool teachers as a cost-effective lever for improving program quality at scale. This report summarizes the findings from the external evaluation of Lead Learn Excel (LLE) through the first 15 months of implementation from October 28, 2014 through January 31, 2017.

## The Lead Learn Excel Model

The Ounce proposed to implement an evidence-based sequence of supports aligned to the Illinois ExceleRate program rating and improvement system that was designed to address the critical gap in preschool instructional practices for the highest risk children in Illinois. LLE aimed to help leaders transform their organizational structures and their roles as instructional leaders; change and re-align behaviors and routines of existing staff to enhance instructional excellence; and use collaborative processes and data to facilitate continuous quality improvement (CQI). Specifically, LLE was designed to advance leader knowledge, skills, and dispositions by providing instructional leaders four complementary core components within a 4-6-week learning cycle: (1) training, (2) technical assistance (TA), (3) peer learning & support, and (4) resources & tools.

## Participants

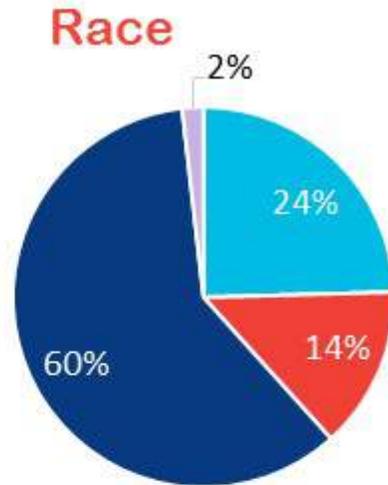
LLE was designed to build the capacity of preschool instructional leaders. Over the course of the evaluation, we characterized a number of variables related to instructional leaders and their systems. We highlight key points in participant data in the following four infographics.



# Instructional Leaders' Background



**97%** Female



- African American
- Hispanic or Latino, Any Race
- White
- Asian

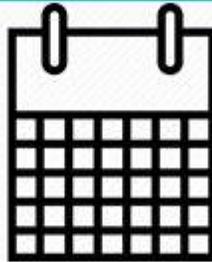


**17%**  
Speak a Language  
other than English

**77%**

Had a Job  
Focused to a Great Extent  
on

**Supporting  
PreK Instruction**



**4+**

**Years Experience**

77% had 4+ years  
leadership experience  
89% had 4+ years  
teaching experience

**67%**

Had at least a  
**Master's Degree**

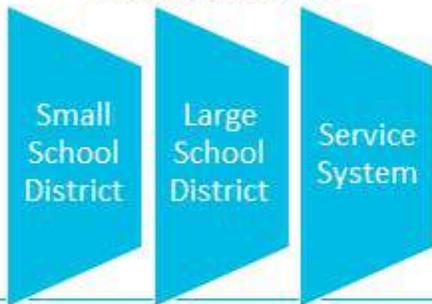


## Systems & Structures



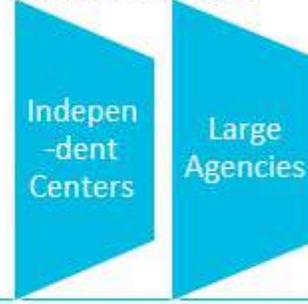
109

School-Based  
instructional leaders



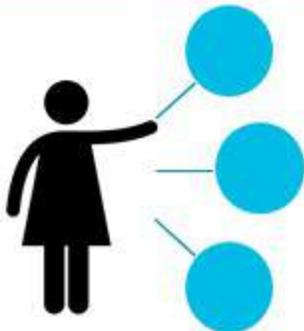
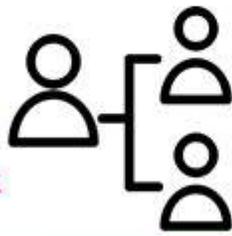
120

Community-Based  
instructional leaders



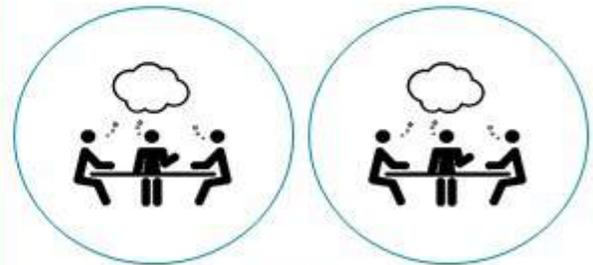
38%

Of instructional leaders  
had a  
**System Support**  
Enrolled in LLE



19%

Of instructional leaders  
**Worked with  
Multiple Sites**  
In LLE



57%

Of instructional leaders  
Were in a system where  
**LLE was implemented at  
Multiple Sites**  
In that system

# Participation in



**LEAD  
LEARN  
EXCEL™**

**132**

instructional leaders

## Year 1 Cohorts A AoE B C E F

2016

2015

**11**

**Cohorts**

staggered with start times  
over 2 school years

## Year 2 Cohorts G H I J K

**177**

instructional leaders



**229**

Instructional leaders remained  
**Enrolled**

**80**

Instructional leaders went into  
**Attrition**



**78**

Instructional leaders  
were on the LLE Track  
**Silver to Gold**



**109**

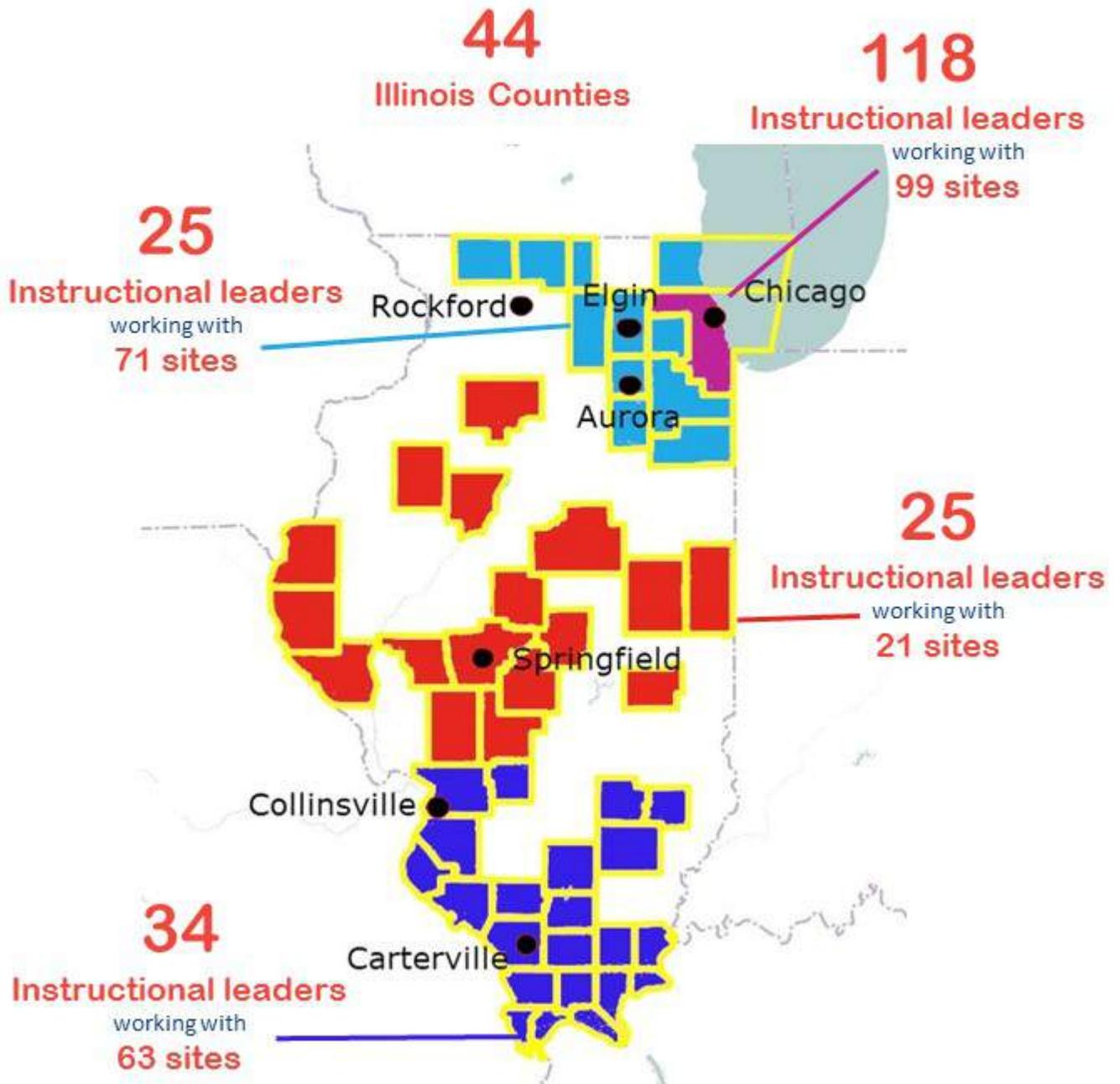
Instructional leaders  
were on the LLE Track  
**Maintaining Gold**



**42**

Instructional leaders  
were on the LLE Track  
**Award of Excellence**

# Illinois Communities Served



## Study Design

### Evaluation Goals

The evaluation had three broad goals. First, the evaluation documented and examined the **fidelity of LLE implementation**. Four criteria for measuring fidelity of implementation served as the guiding framework for this aspect of the evaluation study (Dane & Schneider, 1998; Dusenbury, Brannigan, Falco, & Hansen, 2003; O'Donnell, 2008):

1. Adherence—whether the key components of the professional development (PD) were implemented as designed;
2. Quality of delivery—the degree to which the PD providers delivered the content using the techniques, processes, or methods prescribed by the model's theory of change.
3. Duration—the number, length, or frequency of the professional development or resources and tools implemented;
4. Participant responsiveness—the extent to which participants attended and were engaged by the activities and content of the PD.

This rigorously designed implementation study elucidated the extent to which the quality and frequency of LLE implementation could be attributed to the effects it had on leader development and classroom instructional practice. In other words, an ultimate goal of the implementation study was to determine whether any positive results were attributable to leaders' engagement in the LLE model.

Second, the evaluation assessed the extent to which LLE achieved the intended outcome of advancing participating leaders' mindsets, methods, and practices of instructional leadership. Specifically, the **outcome study** examined change in the leaders' ability to transform their leadership behaviors focused on supporting instructional excellence. Third, the evaluation study was designed to examine whether LLE improved the capacity of leaders to support the **instructional proficiency** of preschool teachers.

Lastly, it should be noted that, drawing on improvement sciences methodology, the evaluation aimed to strike a productive balance between the roles of independent summative evaluator, on the one hand, and collaborative formative evaluator providing rich and timely data and feedback to the implementation process, on the other hand.

### Research Questions

The evaluation was comprised of two complementary studies each focused on a central guiding question.

1. Implementation Study: Overall, was LLE implemented with fidelity as the designers intended?
2. Outcome Study: To what extent did LLE change participants' mindsets, methods, and practices of instructional leadership?

In the next sections, we summarize the findings of each study.

## Implementation Study Summary

In this section, we summarize the findings of the implementation study.

### Fidelity to Structure

We analyzed fidelity of implementation for the domains of adherence, quality of delivery, duration, and participant responsiveness across the four components as seen in Table 1.

**Table 1. Fidelity Scores for the Four Core Components**

<i>Key Components</i>	<b>Fidelity Criteria</b>			
	<b>Adherence</b>	<b>Duration</b>	<b>Participant Responsiveness: Attendance</b>	<b>Participant Responsiveness: Engagement in Reflection</b>
<i>Training</i>	<b><u>2.7</u></b>	<b><u>2.0</u></b>	<b><u>2.3</u></b>	<b><u>2.4</u></b>
<i>Technical Assistance</i>	<b><u>2.0</u></b>	<b><u>2.0</u></b>	0.3	n/a
<i>Peer Learning &amp; Support</i>	<b><u>2.1</u></b>	1.8	0.2	0.2
<i>Resources &amp; Tools</i>	<b><u>2.0</u></b>	<b><u>2.0</u></b>	n/a	1.0

**Bold and underlined** figures meet fidelity.

As a project, LLE met fidelity for adherence, indicating that the core components were implemented as designed; thus training, TA, peer learning groups (PLGs), resources & tools were implemented as the model intended to support the development of leaders’ knowledge, skills, and dispositions.

The Ounce offered training, TA, and resources & tools to all cohorts as intended, meeting fidelity for duration. However, peer learning & support fell short of fidelity because PLGs were not offered in every learning cycle in two cohorts.

Participants attended training and engaged in reflection before and after training as intended, meeting fidelity for participant responsiveness. However, leaders’ attendance to TA and PLGs and engagement in reflection after PLGs was low and did not meet fidelity.

LLE offered a range of resources and tools, but leader uptake was mixed. Leader response to the instructional leadership plan was low, and did not meet fidelity for engagement and reflection in resources and tools. Most participants attended CLASS training and over one third achieved a certificate of reliability.

Over three fourths of leaders received video equipment (that was intended for the examination of their instructional leadership practice during leader PLGs as well as the examination of practice by their teachers during teacher PLGs), while less than half of leaders activated their subscription to the Teachstone Video Library.

Under half of leaders submitted an application for a mini-grant to purchase resources that were essential for preschool instructional excellence or to pay for release time for teachers to participate in embedded professional development routines. Less than a third of leaders received a travel grant.

## Participant Responsiveness Regression Analysis

Although attendance to training was higher for the instructional leaders in late cohorts (year 2 of model purveyor implementation), the opposite was found for their participation in technical assistance. One plausible explanation is that the Ounce encountered challenges with scheduling technical assistance discussed in the quality of delivery section (immediately following) in this chapter.

In sum, the results related to TA suggest that model purveyors often face challenges with certain aspects of their own implementation process. However, with the exception of the relationship between implementation year and Training/TA attendance, the majority of leaders' background and contextual characteristics are not related to participant attendance to training and PLGs. The conclusion drawn from this finding is that instructional leaders from a diverse range of backgrounds responded to LLE in similar ways on average.

## Quality of Delivery

The LLE implementation team employed varying degrees of supports to implement quality PD. Trainings used a range of structures to develop depth of concept knowledge, and were highly structured to cover a considerable amount of content. Participants across all cohorts and learning cycles reported that quality of the training was generally strong. However, responses of participants also indicated that the pacing and sequence of the trainings were not appropriate for all learners.

Regular TA strengthened the relationship between implementation advisors and leaders and facilitated deeper understanding and application of LLE knowledge, skills, and dispositions. Many leaders were not responsive to LLE implementation advisors' requests to schedule regular TA. Logistical support for certain resources and tools, particularly the mini-grant and Award of Excellence, took substantial time and focus in TA.

Peer learning opportunities, in PLGs and during trainings, afforded opportunities to apply knowledge and problem solve in the context of one's own practice. The use of technology to implement PLGs constrained the implementation team's ability to maintain a high positive climate. The scheduling of PLGs for 90 minutes during the school day was not convenient for most leaders. Participants reported that quality of the PLG was generally strong across all cohorts and learning cycles.

Overall, the LLE implementation team consistently fostered sincere and respectful relationships with participants. The relationship between implementation advisors and instructional leaders facilitated advisors' awareness and responsiveness to leaders' concerns across learning contexts. Objectives and goals were stated in all learning contexts, but did not always balance emotional, instructional, and organizational supports. The implementation team was proficient in establishing a positive climate, but did not always employ the cognitive press required for leaders' complex skill development. At recruitment, participants understood the primary goal of LLE to be improving their sites' rating in ExceleRate, and came to understand the wider goals of the project during their initial engagement in LLE learning cycles.

## Purveyor Staff & Systems for Implementation

As a model purveyor, the Ounce demonstrated strengths and encountered challenges in implementing a complex model at scale. LLE staff was highly qualified with diverse roles and expertise. They developed, designed, and curated evidence-based content and resources. LLE staff and systems were responsive to feedback from the participants, state, system leaders, and evaluation. The LLE implementation team engaged in a parallel process as a community of practice and in application of LLE frameworks. However, LLE staff and systems lacked clarity on differentiating the model for participants at different levels of readiness for engaging in LLE; implementation advisors needed additional supports for differentiating the model.

## Evaluation of Lead Learn Excel Executive Summary of the Final Report

To scale the model, LLE built infrastructure to do the work across state and sectors. LLE staff maintained elaborate systems to schedule learning contexts (training, TA, PLG), maintain contact with leaders, and distribute resources and tools. However, LLE staff and systems faced capacity challenges in working with 11 staggered cohorts. The number and breadth of learning contexts, resources and tools challenged staff and systems.

## Outcome Study Summary

In this section, we summarize the key findings regarding outcomes related to preschool instructional leadership development.

### Preschool Instructional Leadership Survey

Analysis of the Preschool Instructional Leadership Survey (PILS) indicated that early childhood education (ECE) instructional leaders reported engaging in similar rates of instructional leadership activity before and after participating in LLE. Analysis of the Instructional Guidance domain of the PILS revealed that participating leaders engaged in behaviors in this domain most often out of the three leadership domains prior to and after LLE. The item level analysis revealed that the only gains in instructional leadership practice in fact occurred with the behaviors in the instructional guidance domain. For instance, this analysis found that the leaders reported an increased use of the language and/or concepts of the CLASS in their conversations with their preschool teachers over time.

Supporting routines for teacher collaboration, as measured by the Professional Capacity domain of the PILS, remained the least frequently implemented set of instructional leadership behaviors. Considering collaborative routines for teachers require an infrastructure to support such systems for adult learning, it only makes sense that instructional leaders found enacting these behaviors most challenging. However, instructional leaders with system-level support (i.e., a system-level leader who also participated in LLE) more frequently enacted behaviors related to instructional guidance and routines for collaborative, professional learning. This finding suggests that system-level support is an important factor in enabling support services to instructional leaders charged with developing the knowledge, skills, and dispositions needed to support effective collaborative job embedded professional development (JEPD).

### ExceleRate Ratings

Although the original charge of the evaluation was to evaluate Lead Learn Excel support services for programs looking to improve their quality rating from Silver to Gold, the infrastructure of the quality rating system itself made it difficult for Licensed, Bronze, or Silver rated programs to apply to improve their ratings. Only the programs that were rated Gold were eligible to apply for an Award of Excellence.

Of the 255 sites affiliated with instructional leaders in LLE, 160 were initially rated Gold. Thirty sites applied for the Award of Excellence in Preschool Teaching and Learning through LLE, and 19 achieved the award by January 30, 2017. Five sites applied for the Award of Excellence in Infant and Toddler Services through LLE, and 2 sites achieved the award before January 30, 2017.

### Transfer to Practice Survey

Analysis of TTPS version 1 indicated that about half of respondents reported implementing data dialogues and team lesson planning more than once, and 58% of respondents reported implementing PLGs more than once. Analysis of TTPS indicated that respondents reported implementing PLGs most often. Overall, rates of leaders viewing video of instructional practice was low, as 77% of respondents reported never using the Teachstone Video Library with teachers, and 88% of respondents reported never having viewed videos they recorded with teachers. Leaders varied in their use of the CLASS. About half of leaders reported using the CLASS lens and language in their work with teachers more than once. Use of the CLASS as an observation tool varied more: 42% of leaders never used CLASS as an observation tool, while a third of leaders reported using it more than once.

## Satisfaction with LLE Support Services

At the end of engagement, 58% of respondents reporting that they were very satisfied with LLE. Participants in late cohorts reported slightly higher levels of satisfaction than those participating in early cohorts; there was no difference in overall satisfaction between school-based and community-based leaders. Overall, leaders reported that the LLE protocols were the resource with which they were most satisfied, followed by the CLASS assessment. School-based leaders were more satisfied with the Teachstone Video Library than community-based leaders. Community-based leaders were more satisfied with mini-grants and video equipment than school-based leaders. Over 70% of the leaders reported that they intended to continue each of the three core routines. School-based leaders intended to continue data dialogues at a higher rate than community-based leaders, while community-based leaders intended to continue PLGs at a higher rate than school-based leaders.

## Focal JEPD Routines

Out of all of the focal routines, PLGs were implemented with the greatest levels of consistency. Instructional leaders from school-based programs had the highest levels of implementation; they were able to integrate PLGs into their preexisting systems (i.e., professional learning communities). The primary barrier to PLGs was protecting time for different classrooms to meet together, particularly for instructional leaders who worked with single classrooms from multiple sites.

Instructional leaders from community-based programs entered into advanced phases of implementation of team lesson planning whereas school-based leaders did not. Three barriers to implementation of team lesson planning emerged. First, leaders struggled to protect their own time to facilitate lesson planning meetings. Second, many programs lacked the structural supports such as system level supervisory leader support that values JEPD pre-existing infrastructure to support JEPD, systems for scheduling routine teacher PD sessions at their sites and protected time for leaders to focus on instructional matters needed to support collaborative lesson planning in the way the model intended. Finally, some school-based leaders felt a lack of competence in facilitating instructional planning.

Instructional leaders from both school- and community-based programs installed supports and entered into initial implementation of data dialogues. Barriers to data dialogue implementation included leader experience and confidence with data, limited access to data, and the combination of high teacher turnover rates with data from previous school years.

## JEPD Systems

Overall, the leaders were evenly distributed across three phases of implementation of the LLE model: exploration, installation, and initial implementation. However, full implementation of a JEPD system was achieved by only a very small number of participants. School-based leaders had the highest percentage of leaders in the initial implementation phase, while community-based leaders had the highest percentage of leaders in the installation phase. Cohorts who participated in LLE during the Ounce's first year of implementation had more leaders reach higher levels of implementation a JEPD system than leaders who engaged in LLE during the Ounce's second year of implementation.

Leaders' job structures, responsibilities, competing reforms, staff turnover, internal support system, and lack of time all influenced the manner in which instructional leaders were able to develop JEPD systems. Although routine implementation of JEPD systems was low, when they did implement these routines they did so with greater intentionality and effectiveness. For example, there was evidence that leaders who implemented team lesson planning focused on goals and objectives derived from classroom practice and child assessment data, and there was evidence that many leaders use the LLE protocols to ensure that all teachers were encouraged to contribute during the PLGs.

## Focal Case Studies

Two center-based (Pam and Nicole) and two school-based leaders (Brandy and Gemma) were selected to illustrate LLE leader development context in the context of two dominant system types. For each system type, we selected one leader who reached the full implementation of LLE JEPD system (Pam and Brandy) and one who is an earlier phase of implementation (Nicole and Gemma). For the sake of confidentiality, all names are pseudonyms.

All four cases illustrated that implementing all core LLE routines as intended by the model requires support, perseverance, and time. Although some of the leaders within the cases were able to implement the core routines most consistently, all four instructional leaders developed a professional learning mindset overtime. The focal content of the LLE trainings deepened their understanding of the importance of “being together and doing the work together on the job instead of just bringing speakers in,” as Gemma explained in her final interview. In the end, all four instructional leaders understood the value of PD that is less about a set number of calendar days per year or number of hours to obtain and more about a way of being within your center or school, a belief that professional learning is continuous, collaborative, engaging, and meaningful.

All four focal case study leaders valued the use of protocols as a method of facilitating teacher learning and development with greater depth and intentionality. Although all of the four leaders mentioned that the peer-to-peer learning that was in the middle of their day was constrained by scheduling, they also explained that it was the collaborative learning structure undergirding all the core LLE routines that helped them grow the most. In addition to finding the peer-to-peer learning as invaluable, all four of these leaders also often spoke highly of the supports they received from their implementation advisors

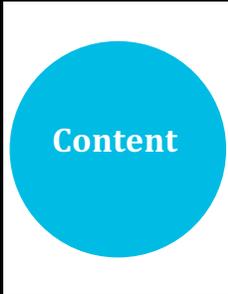
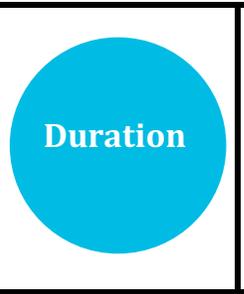
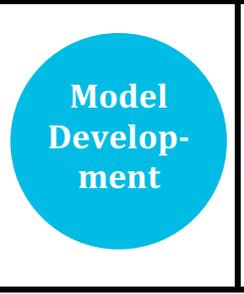
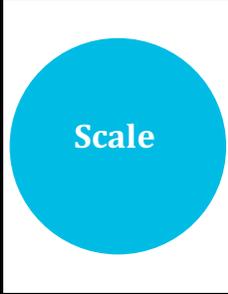
While all four cases shared much in common, there were also important differences in experience that help shed light on how two of them were able to advance in their implementation of JEPD in comparison to the others. A defining feature of the cases of Brandy and Pam is that both of them were participating in LLE with systems-level leader support. As a result, they had supervisors that were aware of the ambitious nature of the LLE model and could subsequently understand the importance of them needing time to use LLE to develop themselves further. Brandy and Pam, the two instructional leaders with greater system-level leader support, were most successful in consistently implementing JEPD.

An additional difference in the four cases of study is related to the competencies that the leaders bring to such an ambitious intervention from the start. Brandy and Pam, for example, came to LLE with the ability to engage in a range of reflective styles that helped them overcome barriers to implementation, and, they were able to focus their reflective practice on the more moral aspects of their educational practice. For instance, they were more inclined to look inwards for how to make improvements in comparison to looking for external causes or scapegoats for blame. In contrast, Gemma and Nicole, the two instructional leaders who were in early phases of implementation, represented leaders who largely entered into and maintained factual and procedural reflective styles of practice. Such limitations in range of their reflective abilities made it difficult for them to see where they had agency to restructure what was in their control. Consequently, they were unable to overcome the challenges they faced when attempting implementation of the core LLE routines.

## Conclusions

In this section, the **successes** and **challenges** of the implementation and outcome studies are highlighted. Evidence of what went well and what could be improved are related to three main themes, which include the Design of the LLE Model, Integration and Differentiation of the LLE Model, and Leader Engagement and Change.

## Successes and Challenges with the Overall LLE Model

	<p><b>Evidence-Based Supports</b> LLE developed, designed, and offered evidence-based content, resources, and tools to develop the knowledge, skills, and dispositions of early childhood instructional leaders.</p> <hr/> <p><b>Content Overload</b> LLE training content and structure asked leaders to process a great deal of complex information.</p>	
	<p><b>Implementation of Learning Contexts &amp; Resources</b> LLE offered 70 trainings, 212 PLGs, 1045 instances of TA, and a range of resources and tools to instructional leaders.</p> <hr/> <p><b>Commitment to Full Model</b> Instructional leaders did not engage in the learning cycles as intended, although they committed to participation.</p>	
	<p><b>Highly qualified staff, extensive systems</b> LLE relied on highly qualified staff organized across implementation, operations, research, and steering teams. The project utilized multiple systems to engage and manage their relationships with participants.</p> <hr/> <p><b>Staff Capacity for Resources &amp; Tools</b> The implementation team expended substantial time and money on resources and tools, some of which were utilized by a small percentage of participants.</p>	
	<p><b>Iterative Reflection</b> The LLE team engaged in cycles of reflection with the intent of modifying the model in ways that made it more responsive to the needs of early childhood instructional leaders.</p> <hr/> <p><b>Implementation Year</b> LLE supports were influenced by their ongoing development and increased enrollment in the second year of implementation.</p>	
	<p><b>Statewide, Cross-Sector Reach</b> LLE engaged leaders throughout the state from school-based and community-based systems at similar rates of support.</p> <hr/> <p><b>Implementation Team Capacity</b> Providing support services for 229 instructional leaders maxed out the capacity of the implementation team and inhibited their engagement of leaders from diverse contexts.</p>	

## Successes and Challenges with Integration and Differentiation



### Partnerships

#### Statewide Partnerships

LLE partnered with agencies and system leaders throughout the state to recruit and enroll leaders.

#### System Support

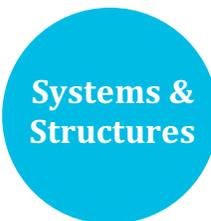
LLE lacked a clear model for leveraging system support for LLE instructional leaders during implementation of the support services.

#### Existing Systems & Structures

Leaders who worked within programs that already had systems & structures to support JEPD were more successful in implementing the core LLE routines.

#### Exploring Systems & Structures

Leaders who worked within programs without a preexisting infrastructure to support JEPD were unable to fully implement the core LLE routines.



### Systems & Structures



### Supports

#### Relationships

Implementation advisors built strong and productive relationships with leaders.

#### Differentiated Scaffolds

The model lacked explicit supports for scaffolding the development for participants at early stages of readiness, particularly in the contexts of TA and PLGs.

#### High Regard for Protocols

Leaders found value in using LLE protocols and tools to support the facilitation of JEPD.

#### Video Resources Underutilized

Leaders underutilized the video camera and video library in their efforts to encourage the examination of practice.



### Resource Utilization



### ExceleRate Illinois QRIS

#### Awards of Excellence Achieved

19 programs were awarded the Award of Excellence in Preschool Teaching and Learning; 2 were awarded the Award of Excellence in Infant and Toddler Services in the ExceleRate Illinois Quality Recognition and Improvement System.

#### Transitioning to a New Quality Recognition System

There was confusion as to which leaders were eligible to apply for a higher quality recognition due to four different guidelines.

## Successes and Challenges with Leader Engagement and Change

	<p><b>Training Engagement</b> Leader attendance to training and their reflection on the training content was high.</p> <hr/> <p><b>Peer Learning &amp; Support and Technical Assistance Engagement</b> Leader engagement in PLGs, PLG reflection, and TA was low. Leader reflection on their practice via their instructional leadership plans and transfer to practice surveys was limited.</p>	
	<p><b>Self-Reflective &amp; Personal Responsibility</b> Leaders who were more self-reflective and willing to look inwards for how to make improvements were most able to persist in the face of barriers to JEPD implementation.</p> <hr/> <p><b>Lack of Agency</b> Leaders who were less self-reflective and often looked to external reasons for why they were unable to successfully implement JEPD lacked a sense of agency regarding their ability to overcome challenges to implementation.</p>	
	<p><b>Willingness to Try</b> Most leaders tried to implement the core routines of data dialogues, team lesson planning, and peer learning groups at least once.</p> <hr/> <p><b>Consistent Leadership Behavior</b> Overall, leaders implemented similar rates of instructional leadership behavior before and after their participation in LLE.</p>	
	<p><b>Mindsets</b> Leaders were satisfied with LLE and believe it is likely to be sustained.</p> <hr/> <p><b>Additional Supports</b> Analysis of TA documentation indicated that most leaders were only in early stages of implementation at the end of LLE. They would likely need additional supports to advance and sustain their practice.</p>	
	<p><b>Data Readiness</b> LLE renewed leaders' focus on classroom practice assessments and data.</p> <hr/> <p><b>Data Access</b> Leaders and evaluators faced barriers to accessing classroom practice data.</p>	

## Recommendations & Implications

### Recommendations for Professional Development Purveyors

There is evidence for several recommendations for PD purveyors to consider when implementing a similar model at scale.

- ✓ Allow more time for knowledge development and application within and between trainings.
- ✓ Establish realistic benchmarks of growth for leaders and programs.
- ✓ Focus supports on key resources.
- ✓ Carefully consider capacity.
- ✓ Sustain systems for reflection and iteration between teams.
- ✓ Integrate systems for data access and collection processes into the model.
- ✓ Effective and efficient distance learning formats for professional development are needed to maximize impact.
- ✓ Establish and communicate clearer expectations for participation and communication.

### Policy Implications

There are implications for policymakers to consider when assessing the feasibility of and support for similar job-embedded professional development models at scale.

- ✓ Define the key components needed to address the policy problem.
- ✓ Build upon the application of K-12 quality improvement frameworks to the early childhood education sector while also honoring the unique needs and contributions of this sector.
- ✓ Continue to address the multifaceted obstacles facing the early childhood education sector.
- ✓ Avoid competing reforms and integrate job-embedded professional development into preexisting systems.
- ✓ Renew emphasis on improvement in the quality recognition and improvement system.
- ✓ Consider how to strengthen infrastructure for classroom practice data for practitioner reflection and program evaluation.
- ✓ Consider time necessary to support full implementation of leader learning and realize impacts on classroom practice.

### Research Implications

There are implications for researchers to consider when examining preschool instructional leadership development and/or evaluating professional development models for early childhood instructional leaders.

- ✓ Characterize the job roles and structures of preschool instructional leaders across early childhood sectors.
- ✓ Define early childhood instructional leadership.
- ✓ Examine the conditions for readiness for installation and implementation of JEPD in early childhood contexts.
- ✓ Develop multiple criteria and mixed methods approaches to measuring fidelity of implementation in order to enable a nuanced understanding of implementation.
- ✓ Study the impact of feedback loops between external evaluators and implementation team members on the quality of evaluations.
- ✓ Develop data collection measures that facilitate reflection while supporting rigorous analysis.
- ✓ Validate the quality rating and improvement system